American University of Science and Technology

Experiment 1

Preparation of Solution

Homework

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Course : CLS 320 L

1) n = m/M

m = nxM= 0.6375 x 58.5= 37.29 g

n = CxV = 0.75 x 850 x 10 *-3 = 0.6375 mol

2) n= m/M = 132/58.5 = 2.256 mol

C = n/V = 2.256/900 x 10 *-3 = 2.506 mol/L

3) n= C x V = 3 x 1.8 = 5.4 mol

m=nxM = 5.4 x 60.05 = 324.27 g

4) upon dilution nbr of mole of solute is conserved

n1=n2
C1V1=C2V2
8 x V1 = 1.2 x 0.5
V1= 0.075 L

5) n= m/M =45/40 =1.125 mol

C = n/V = 1.125/ 600 x 10 *-3 = 1.875 mol/L